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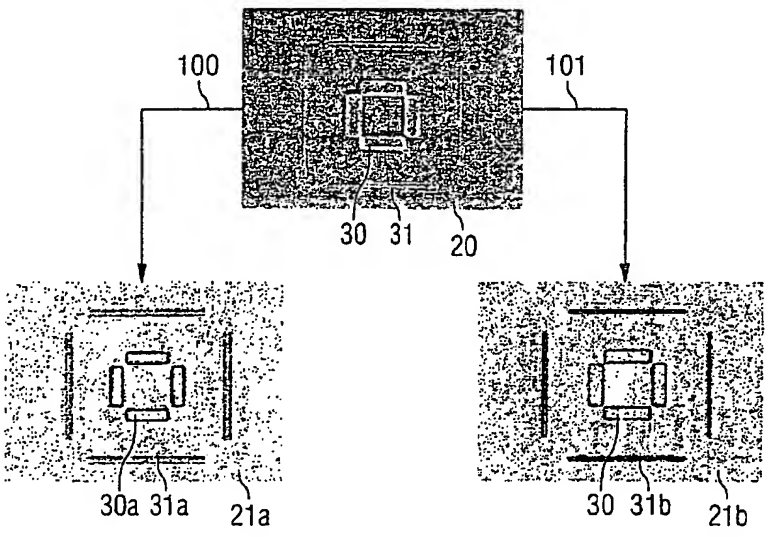
(54) Title: METHOD FOR PERFORMING AN ALIGNMENT MEASUREMENT OF TWO PATTERNS IN DIFFERENT LAYERS ON A SEMICONDUCTOR WAFER



(57) Abstract: In an alignment or overlay measurement of patterns on a semiconductor wafer (1) an error ocurring during performing a measurement in one of a predefined number of alignment structures (20) in an exposure field (2) of a corresponding predefined set of exposure fields (10) can be handled by selecting an alignment structure (21b) in a substitute exposure field (11). This exposure field (11)can be an alignment structure (21a) in the same exposure field (10,11), i.e. an intra-field change (100), or an other field not being part of the predefined set of exposure fields (10), i.e. aninter-field change (101). due to the might not erode and do not cause an error in a measurement, thus provinding an increased alignement or overlay quality.

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